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JR**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Patent Application Serial No.:	09/993,733	)	
		)	Group Art Unit: 1772
Filing Date:	November 21, 2001	)	
		)	Examiner: Augehenbaugh,
For:	Concrete Formworks And Method Of	)	Walter
	Making Same	)	
		)	Docket No: 13190.101
Inventor:	Gregory D. Johnson	)	
		)	Attachment to Paper No.: 6

**DECLARATION OF EDWARD RAHE**

1. I, Edward Rahe, am currently Vice-President of Engineering for Symons Corporation. Symons is the leading manufacturer of concrete formworks and shoring in the United States. (See Exhibit A attached to this Declaration, which is a copy of the Symons home page on the Internet.) I am a Professional Engineer and have worked in the area of concrete formworks for thirty-eight years. All statements made herein of my own knowledge are true, and all statements made on information and belief are believed to be true.

2. I have read and am familiar with the claims currently in the application, and I have read and am familiar with United States Patent No. 5,030,488 issued July 9, 1991 to Igor Sobolev (hereinafter "Sobolev"), and United States Patent No. 4,842,241 issued June 27, 1989 to John M. Fitzgerald et al. (hereinafter "Fitzgerald et al.").

3. I submit this Declaration to present to the examiner facts concerning the patentability of the claims in the application, including bringing to the attention of the examiner, in an authenticated manner, information relating to the patentability of the claims.

4. Claim 1 of the patent application describes a concrete formwork panel including a high-density polyethylene plastic core and a steel facing.

5. I note that neither Sobolev nor Fitzgerald et al. suggest such a combination, for concrete formwork or any other purpose.

6. At column 9, lines 27 – 30, Sobolev mentions steel as one of many metals

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that could be used to make a laminate panel. There is no suggestion at all that steel is any better than any other metal.

7. Sobolev is a very lengthy patent, but as far as I can tell the only other place that it mentions steel is at column 19, line 50 in connection with a failed example; that is, the only example in which steel was used failed because the core cracked under an impact test. It appears that all the successful examples in Sobolev use aluminum as a facing material.

8. From my own tests, the combination of steel facing with a high-density polyethylene core provides a concrete formwork panel that is vastly superior to all previous concrete formwork panels. Someone experienced in this field would never guess this from Sobolev, Fitzgerald et al., or their combination.

9. As part of my work, I have tested scores of different concrete formwork panels. My tests are quantitative and documented by a huge amount of records; however these records are proprietary to Symons and, in a sense, the life blood of our company. Therefore, I would prefer not to disclose them in detail. However, I can say that I have carefully studied the results of the tests, and the panel described by claims 1, 39 and other claims of the application (the Johnson panel) is the best I have ever found.

10. One example of a comparative test I put the Johnson panel through is shown in the attached Exhibit B. This compares the face sheet deflection at the centerline of bay supports at 12 inch center to center continuous over nine supports for a 3/8 inch Johnson panel, a new 1/2 inch HDO (high density overlay) panel, and a used 1/2 inch HDO panel. For concrete formworks this is the most important test since it shows how the panel will hold against the pressure of concrete. The Johnson panel is labeled "McCormick" since J. M. McCormick Co. is the company Mr. Johnson sells these panels through. As you can see a 3/8 inch Johnson panel is about 20% better than the 1/2 HDO panel and 43% better than a used 1/2 HDO panel. The 1/2 inch HDO panel is the most common concrete forming panel in use today.

11. The above results are surprising for a panel so thin and lightweight. They are even more surprising when you consider that the Johnson panel is about 85% plastic. It is very surprising that a metal/foamed plastic panel in which the plastic is over 30% gas gives

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such good results.

12. The Johnson panel is also superior to all other panels I have tested in many other ways. For example, after a short time, other panels do not produce as smooth a concrete surface as the steel and high-density polyethylene combination.

13. Wood, for example, gets grooves, scratches, and other defects on its face that show up in the concrete surface, while aluminum facing is sensitive to the lye and other chemicals used in concrete and becomes marred after a short time, with the result that the concrete that is formed is no longer smooth.

14. The combination of steel facing with a high-density polyethylene core provides a concrete formwork panel that is lightweight and durable and at the same time provides an excellent finish.

15. I note that both Sobolev and Fitzgerald et al. are fifteen years old. If a concrete formwork panel made of steel and high-density polyethylene combination as described in claim 1 or a foamed metal-plastic panel with over 32% gas by volume as described in claim 39 are obvious in view of these references, why has no one made such a formwork panel before this, particularly since it is such an excellent formwork?

16. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under 18 U.S.C. §1001, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Date: 10-2-03 By: Edward C. Rahe P.E.  
Edward Rahe, P.E.

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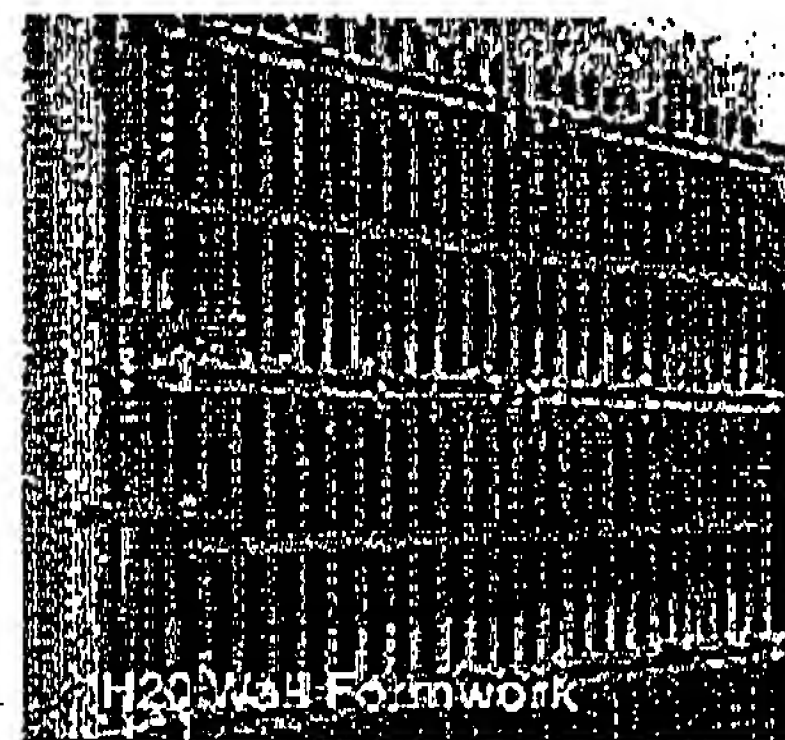


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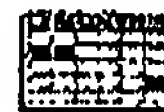
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# Face Sheet Deflection At Center Line of Bay Supports at 12" Center to Center Continuous Over 9 Supports

